REMARKS

The Official Action of July 6, 2007, and the prior art relied upon therein have been carefully reviewed. The claims in the application, not counting the withdrawn claims, are now claims 16-19, 21 and 22; withdrawn claims 15 and 20 have been deleted without prejudice to applicant's rights to pursue such claims in a divisional application along with the other withdrawn claims.

Applicant respectfully submits that the present invention defines novel and unobvious subject matter and should be allowed. Favorable reconsideration and allowance are respectfully urged.

The restriction requirement has been repeated and made final, whereby claims 1-15 and 20 have been withdrawn from further consideration.

Fig. 5 is now proposed to be amended with the legend "Prior Art" as required in paragraph 5 of the Official Action.

The objection of claim 16 in paragraph 6 is not understood, as applicant sees no difference between reciting a "carbon fiber formed of oxidized fibers of polypropylene" and a "carbon fiber formed from oxidized fibers of polypropylene." Nevertheless, in deference to the examiner's views, the word

"of" has been changed to "from". Applicant intends no difference in meaning.

Claims 16-18 have been rejected under the first paragraph of Section 112 as not being fully enabling. The rejection is respectfully traversed.

Nevertheless, and again in deference to the examiner's views, applicant's claims now explicitly recite that the fabric is woven.

New claims 21 and 22 have been added, respectively dependent on clams 16 and 17. These claims are patentable because they respectively depend from and incorporate the subject matter of claims 16 and 17 which are patentable for the reasons set forth below. Support for claim 21 is found in Table II, pages 5 and 6 of applicant's specification; support for claim 22 is found at page 4, line 10 of applicant's specification.

Claims 16-19 have been rejected as obvious under Section 103 from McCullough USP 4,950,533 in view of Ram USP 3,914,393. This rejection is respectfully traversed.

The present invention relates to a carbon fiber fabric which is not only made in a novel and unobvious way giving it novel and unobvious properties, but which also has a novel and unobvious structure. In particular in this latter

regard, neither the warp density nor the weft density of the carbon fiber fabric as set forth in claim 16 is disclosed by either of the cited and applied references. Also, the fabric density of the oxidized polypropylene fibers as set forth in claim 16 is not disclosed by either of the cited and applied references. Accordingly, there is no way that any combination of such references, even if such a combination were obvious (not conceded by applicant), could reach applicant's claims.

An object of the present invention is to provide a carbon fabric having high conductivity with high magnetic wave shielding efficiency, combined with relatively low shrinkage, noting for example the first paragraph of applicant's specification at the top of page 1. The objective in McCullough is to provide a flame retarding and fire barrier structure comprising a blend of carbon fibers with polymeric fibers; this is clearly a different objective than applicant's objective and a different structure, whereby the person of ordinary skill in the art seeking a carbon fabric (not a mixed fabric) with the properties of applicant's carbon fabric (not the properties of the McCullough fabric) would not have any reason to even consider McCullough.

Ram has an even different objective from McCullough, namely to produce carbon fibers from acrylic fibers while controlling the generation of highly toxic hydrogen cyanide

gas. The relationship between McCullough and Ram is therefore very tenuous at best, as is the relationship of both references to the type of carbon fabric of the present invention. Indeed, the carbon fabric of the present invention uses carbon fibers of oxidized polypropylene, clearly contrary to the teachings of Ram.

In short, the proposed combination would not have been obvious because of the aforementioned differences. Moreover, even if the combination were obvious, contrary to applicant's position, the reconstructed McCullough in view of Ram would not correspond to the claimed subject matter.

In this latter regard, the general rule is that all recitations which appear in an applicant's claim must be given consideration. In addition to the differences pointed out above, applicant does not see that the references even in combination (assuming momentarily and *ad arguendo* the obviousness of the combination) would provide a carbon fabric formed from (or of) woven fibers of polypropylene, and oxidized to carbon, as claimed; or a carbon fabric having a density of 1.68 g/ml as claimed, or a magnetic wave shielding efficiency of over 30 dB when subject to a magnetic wave having a frequency of 300 MHz to 2.45 GHz as claimed.

Applicant respectfully notes that the burden of establishing a *prima facie* case is initially on the PTO. One

cannot assume the presence of features which are not disclosed by the prior art, unless those features are inherent, and that means that inherency is **reasonably certain**. There is no reasonable certainty that the McCullough fabric has such properties (please especially note that some of the McCullough fibers, at least 7.5% are not even carbonaceous), and therefore there is no inherency. The PTO has not met its burden.

The rejection states that the substitution of known equivalent structures involves only ordinary skill in the art, but in the present case there is no known equivalent structures. As pointed out above, the structures are very different. Applicant's fabric, having been carbonized **after** it was woven, does not have any fibers which are uncarbonized, contrary to the requirements of McCullough.

The rejection states at the top of page 6 that "it is the examiner's position that the article of the applied prior art is identical to or only slightly different than the claimed article." Applicant most strongly traverses this conclusion which (respectfully) is based on speculation and no evidence whatsoever. In effect, such a statement is equivalent to stating that all carbon fabrics are the same, which clearly is not correct. Structural and physical

differences have been pointed out above, and there is no justification for the conclusion stated in the rejection.

The rejection does correctly state that the determination of patentability of a product defined in part or in whole by the process of manufacture "is based on the product itself." The point which appears to be overlooked, however, is that processing may provide a product which is inherently different, and consequently **differences in the product itself** may properly be characterized by the process by which such product is made. In this regard, attention is respectfully invite to *In re Luck et al*, 177 USPQ 523, 525 (CCPA 1973) where the Court stated:

> As for the method ..., it is well established that product claims may include process steps to wholly or partially define the claimed product. [citation omitted] To the extent these process limitations distinguish the ***product*** over the prior art, they must be given the same consideration as traditional product characteristics. [emphasis in original]

Claim 19 has been rewritten in independent form, and the method, by which the product is made, results in a different product from anything disclosed in either of the citations.

Claims 16-18, 21 and 22 do not contain any so-called process limitations. Any recitations in these claims which might be deemed "process limitations" are instead recitations of what the fabric is.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 16-19 have been rejected as obvious under Section 103 from McCullough in view of Ogawa et al USP 4,861,809 ("Ogawa"). This rejection is respectfully traversed.

McCullough has been thoroughly described above, and applicant's comments above regarding McCullough are respectfully repeated by reference. Ogawa relates to a friction material, e.g. for brake or clutch pads. The idea is to substitute carbon fibers in such pads in place of carcinogenic asbestos. As with Ram, the Ogawa fibers are made from acrylic polymers. No fabric at all is made, but instead the fibers are used embedded in a thermoset resin matrix just as asbestos fibers were previously embedded.

Considering the differences between the objectives, uses and structures of McCullough compared to Ogawa, the person of ordinary skill in the art would have had no reason to take anything from Ogawa and substitute it into McCullough. Moreover, even if such were done, applicant's claimed subject matter would not be obtained for the same reasons as pointed out above in applicant's reply to the rejection based on McCullough in view of Ram.

Withdrawal of the rejection is in order and is respectfully requested.

Applicant believes that all issues raised in the Official Action have been addressed above in a manner that should lead to patentability of the present application. Favorable consideration and early formal allowance are respectfully requested.

Respectfully submitted,

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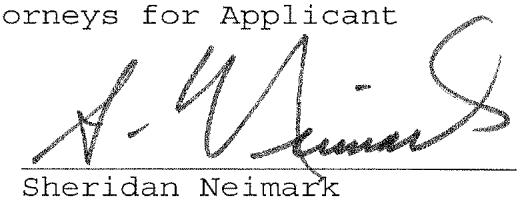
By 
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